

REMARKS**I. INTRODUCTION**

Claims 1, 9 and 16 have been amended. No new matter has been added. Thus, claims 1-21 remain pending in the present application. In view of the above amendments and the following remarks, it is respectfully submitted that all of the pending claims are allowable.

II. THE U.S.C. §103(a) REJECTIONS SHOULD BE WITHDRAWN

Claims 1-21 stand rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication No. 2004/0013128 to Moreton et al. (hereinafter "Moreton"), in view of U.S. Patent Application Publication No. 2003/0048770 to Proctor (hereinafter "Proctor"), and in further view of U.S. Patent No. 6, 853,348 to Jung et al. (hereinafter "Jung"). *11/16/05 Office Action*, pages 2-7.

Moreton discloses a Wireless Local Area Network ("WLAN") access point ("AP") and a method to control the AP to allow multiple clients that utilize different wireless standards to transmit and receive data. *Moreton*, Abstract. Moreton teaches an AP and a method where two different wireless standards can be supported simultaneously, giving the appearance of there being only one network. *Moreton*, ¶ [0015]. Although Moreton discloses an access point and a method that utilizes two different frequency bands in implementing a WLAN, Moreton still requires the either the channel to be reserved prior to transmission or for the AP to sense the channel to determine if it is clear. "[A]ccess to channel is controlled using a mechanism called carrier sense multiple access with collision avoidance (CSMA/CA)." *Moreton*, ¶ [0072]. CSMA/CA is a "distributed mechanism specifically referred to within 802.11 as distributed co-

ordination function (DCF)" that listens to ensure that no other station is transmitting, and if it recognizes that the channel is being used, applies a random time during which to "back-off" until checking the channel again. *Moreton*, ¶¶[0072]-[0075]. A further mechanism that may be incorporated is a request to send ("RTS") and clear to send ("CTS") frames in trying to avoid collisions ("RTS/CTS"). *Moreton* builds on the RTS/CTS procedure by adding data to the RTS and CTS frames that inform the receiving station, transmitting station, and other stations on the network, the time period during which the channel has been reserved so that other clients on the network would not attempt to transmit data. *Moreton*, ¶ [0084].

Independent claim 1 recites, "transmitting payload data *exclusively* on the first band *without having to reserve the first band prior to transmission and without sensing for communication activity on the first band prior to transmission.*" (Emphasis added). The Examiner correctly points out that the "DCF consists of a basic mode as well as the optional RTS/CTS access mode Basic access mode comprises a node sensing the channel to determine whether another node is transmitting before initiating a transmission," and also that the "method of *Moreton* can use the basic mode or the optional RTS/CTS access mode." *11/16/05 Office Action*, page 2. Thus, the system of *Moreton* either requires the reservation of a channel (RTS/CTS mode) or the sensing of the channel to determine if it is busy (basic mode). The present invention eliminates the need to reserve a channel and sense the channel. Thus, the present invention eliminates the possibility of even encountering a "back-off" time (delay) that is possible in basic mode under *Moreton*. Accordingly, *Moreton* neither teaches nor suggests transmitting payload data on a first band "*without having to reserve the first band prior to transmission and without sensing for communication activity on the first band prior to*

transmission.”

Neither Proctor nor Jung cure this deficiency of Moreton. Proctor discloses a technique for using directional antennas in wireless data transmission systems. *Proctor*, Abstract. The purpose of Proctor is to utilize a directional antenna array to improve the signal integrity to those clients in the network. *Proctor*, ¶ [0007]. Although Proctor is dealing with wireless networks, it embraces the RTS/CTS mechanism. (See *Proctor*, ¶¶ [0014]-[0018]). Thus, the method in Proctor does not eliminate the need for preliminary broadcasts used to reserve a channel, such as the RTS/CTS mechanism, but incorporates such a mechanism into its design.

Jung discloses the design of a dual band linear antenna array. *Jung*, Abstract. There is no mention in Jung regarding any wireless network or WLAN. Jung merely deals with the hardware design of a specific antenna array.

Accordingly, neither Moreton, Proctor, nor Jung, alone or in combination, suggests or teaches a method that comprises “transmitting payload data *exclusively* on the first band *without having to reserve the first band prior to transmission and without sensing for communication activity on the first band prior to transmission*” as recited in independent claim 1. Thus, it is respectfully submitted that the 35 U.S.C. 103(a) rejection of claim 1, and the claims depending therefrom (claims 2-8) should be withdrawn.

Similar to claim 1, claim 9 recites a method comprising “the first device transmitting the payload data without having to reserve the first band and without sensing for communication activity on the first band prior to transmission.” Therefore, for at least the reasons discussed with respect to claim 1, it is respectfully submitted that the 35 U.S.C. 103(a)

rejection of claim 9, and the claims depending therefrom (claims 10-15) should be withdrawn.

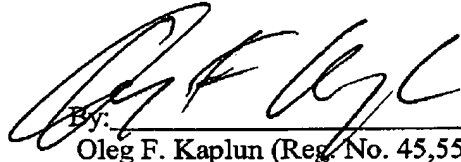
Similar to claim 1, claim 16 recites a device comprising “wherein payload data is uni-directionally transmitted using the smart antenna on the first band without having to reserve the first band prior to the transmission of the payload data and without sensing for communication activity on the first band prior to transmission.” Therefore, for at least the reasons discussed with respect to claim 1, it is respectfully submitted that the 35 U.S.C. 103(a) rejection of claim 16, and the claims depending therefrom (claims 17-21) should be withdrawn.

CONCLUSION

In view of the remarks submitted above, Applicant respectfully submits that the present case is in condition for allowance. All issues raised by the Examiner have been addressed, and a favorable action on the merits is thus earnestly requested.

Respectfully submitted,

Dated: February 21, 2006


By: _____
Oleg F. Kaplun (Reg. No. 45,559)

Fay Kaplun & Marcin, LLP
150 Broadway, Suite 702
New York, NY 10038
(212) 619-6000 (phone)
(212) 619-0276 (facsimile)